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CENTRAL INTELLIGENCE AGENCY REPORT

INFORMATION REPORT

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SUBJECT The Wire-Weaving Industry in Thuringia

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1. There are altogether five firms in the DDR which produce fine-gauge wire mesh. They are as follows:

<u>Name</u>	<u>Location</u>	<u>Equipment</u>
Metallweberei Neustadt/Orla (VVB Tewa)	Neustadt/Orla, Thuringia	60 looms, of which 20 are new, and the remainder, old and inferior
Stanz- u. Drahtwebwerke Hoerbrandt (VVB Tewa)	Raguhn, Saxony-Anhalt	30 looms
Metalltuchweberei*	Eudolstadt, Thuringia	28 looms
Baderschneider & Lenzner and Erich Knöcher & Co. (merged)	Zeulenroda, Thuringia	32 looms
Gebrüder Beyer	Gräfenthal, Thuringia	30 looms

Of the five the Zeulenroda firm weaves by far the best mesh, but as yet its capacity has not been used fully. The Beyer firm of Gräfenthal is scheduled for confiscation, i.e. for absorption into VVB Tewa.

2. In 1950, the five firms mentioned above produced a total of about 170,000 m² of fine-gauge mesh of very pure aluminum, nickel, phosphor-bronze and molybdenum wire. Greatest stress was laid on nickel wire mesh. Of this total, 70,000 m² was woven during the last six months of the year.
3. Palilov is the Russian officer responsible for the wire-weaving industry and is directly in charge of the section which checks finished mesh for acceptability for export. He lives in Weimar, but works permanently in Neustadt/Orla.

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4. The Metallweberei Neustadt/Orla, with 60 looms, is the largest concern in the industry. Its staff includes a director (Betriebsleiter), a personnel manager and a production manager under whom are two senior master-weavers, three master-weavers and three assistant master-weavers. There are 180 weavers employed in three eight-hour shifts. The 60 weavers on each shift are assisted by seven preparers (Vorarbeiter). The remainder of the labor force is composed of administrative personnel and works police.
5. The norm for weavers, set by the Soviet Control Commission (SKK), Karlshorst, is 1.9 m. of mesh per loom per shift. This is regarded as a minimum, and as soon as the output exceeds 2.1 m. per loom per shift, the weavers are paid piece rates (Akkordlohn). Since September 1950, the Russians have increasingly stressed the extreme importance of wire mesh production, and have pressed continually for increases in output. However the labor force is showing signs of strain, and the output per weaver has been steadily decreasing.
6. The 1951 program for the Neustadt firm is as follows:

The firm has been officially notified by the DDR's Office for Reparations in Berlin that orders for the following types of meshes will be forthcoming:

<u>Metal</u>	<u>Gauge</u>	<u>Wire diameter</u>
a. Pure nickel	7,000	0.05 mm.
b. " "	8,600	0.04 mm.
c. Phosphor-bronze	10,000	0.04 mm.
d. Molybdenum	13,000	0.03 mm.
e. Phosphor-bronze	22,000	0.03 mm.
f. Phosphor-bronze	32,000	0.02 mm.

Tolerances for wire diameter are given by the Office for Reparations as ± 0.001 mm in all cases. However, Palilov, the local SKK representative, has increased them to ± 0.002 mm. The Office for Reparations bases its orders on Technische Arbeits (TA) norms. But, for the most part, the meshes are woven on old looms not built for working according to TA norms, so that item a. (nickel) is actually woven at $7,300/\text{cm}^2$ gauge, and item e. (phosphor-bronze) would be woven at $2,900/\text{cm}^2$.** This arrangement has Palilov's approval.

7. There has been no official indication that very pure aluminum mesh is to be woven again in 1951.
8. Orders on hand

Up to April 1951, the Neustadt wire-weaving plant had received only two orders, which are as follows:

- a. Pure nickel mesh

Gauge:	7,000/cm ² (woven as 7,300/cm ²)
Weft diameter:	0.054 \pm 0.002 mm.
Warp diameter:	0.050 \pm 0.002 mm.

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Width of mesh: 1.20 m.
 Amount: unknown
 Weight: 0.3030 Kg. per m².

b. Molybdenum mesh

Gauge: 13,000/cm²
 Weft diameter: 0.035 ± 0.002 mm.
 Warp diameter: 0.030 ± 0.002 mm.
 Width of mesh: The mesh is woven in six parallel strips each 30 cm. wide
 Amount: unknown

Only one loom is used on the molybdenum mesh program, but it is kept running continually on all three shifts. this mesh is destined for use in radio tubes of a special type. On both orders, mesh is normally woven in pieces 50 m. long.

9. The acceptance tests for wire mesh are described as follows:

- a. Finished mesh is graded in three classes according to the number of flaws per square meter.
- b. Nickel wire mesh is roughly tested by the weaver, by pouring first water, and then gasoline on it. The former should not pass through the mesh; the latter should do so easily.
- c. The finished mesh then passes over light tables equipped with opal glass tops and illuminated from below with gaseous discharge lamps. Here the mesh is examined with magnifiers specially designed by Zeiss, Jena. Palilov spends most of his time supervising this work.
- d. If the flaws detected exceed 150 per square meter, the mesh is nevertheless exported to Russia and paid for at a lower rate according to the number of flaws.
- e. Breaks in warp and weft wires occur and may be mended by the weaver. The discovery of one such flaw in a 50-m. roll of mesh automatically grades it in the second class.
- f. The firm is credited with 96 DM (Ost) for every square meter of mesh accepted.

10. main sources of wire for the industry are as follows:

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- b. Kabelwerk Köpenick, formerly C. J. Vogel, Draht- und Kablewerke, Berlin-Köpenick.
- c. Kupfer-und Messingwerk, Hettstedt (SAG Marten).

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11. [REDACTED]

12. The SAG Marten plant in Hettstedt has recently raised its price for wire from 16 to 172 DM Ost per kilogram, retroactive to 1 May 1950. This has thrown all five weaving firms into debt, and they have approached the Office for Reparations for the necessary credits to pay off this debt.

13. Because of the age and poor state of most of the looms being used for this program, the finished mesh shows steadily increasing variations in gauge, i.e. number of openings per square centimeter. There is little prospect of replacing the looms since the entire output of looms from the Drahtwebstuhlbau Neustadt (VVB ZEW) is exported to Russia as reparations. Up to now (April 1951), Palilov has shown no interest in replacing the looms operating in Thuringia.

14. The following indications of a wire mesh program in Moscow have been reported:

a. In 1947, a certain Franz Gebhardt of Raguhn, who was formerly employed as a preparer (Vorarbeiter) at the Neustadt wire-weaving plant, prior to its becoming a VEB, signed a five-year contract for work in Moscow. Similar written contracts were offered at the same time to other preparers. These contracts specified that the men were required to work in "Werk Bolshevik" in Moscow. [REDACTED]

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b. In 1950, Gebhardt visited Neustadt/Orla to accept delivery of some looms from the Drahtwebstuhlbau Neustadt and tried to persuade a number of former colleagues to take jobs in Moscow. "Werk Bolshevik" was again mentioned at that time.

* [REDACTED] Comment: This firm is possibly the former Präzisions-Drahtgewebefabrik Ingenieur Paul Eyring in Rudolstadt.

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** [REDACTED] Comment: Sic. This figure should probably be 22,900/cm² in view of the figure given in item e.

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